

Claims 1-51 are pending in the present application with Claims 1, 3, 6-15, 18, 22 and 23 having been amended by the present amendment.

This amendment is supplemental to the amendment filed August 21, 2002, and is based on a discussion conducted with Examiner Nguyen on August 23, 2002. The claims have been further amended to address the rejection of Claims 1-25 and 42-45 under 35 U.S.C. § 112, second paragraph, noted in the outstanding Office Action mailed March 21, 2002.

For example, regarding the outstanding Office Action's question about how can the first apparatus know information about "the image distortion correction capability of the second exposure apparatus," the appropriate claims have been amended to recite that this information is stored (e.g., stored image distortion correction capability). This feature is supported in the specification at least at page 49, lines 17-22 which states that "this adjustment is performed in accordance with the information on the image forming characteristics correction capability of the exposure apparatus 20A, which information is inputted previously via the input unit 21₂ by the operator and stored in the memory device." Further, regarding the phrase "in consideration of an image distortion which is difficult or impossible to be corrected by the exposure apparatus" has been changed to "in consideration of an image distortion that cannot be sufficiently corrected by the exposure apparatus." That is, as discussed in the specification, with a scanner type apparatus, for example, it is difficult to generate an axial symmetrical image distortion component. Further, regarding the outstanding Office Action's indication that the functional recitations such as "so as to reduce an image distortion" in the claims is indefinite because the claims have no sufficient structures, Applicants note the claims that include these recitations are method claims.

Accordingly, it is respectfully submitted the claims are definite within the meaning of

35 U.S.C. § 112, second paragraph.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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IN THE CLAIMS

1. (Amended) An exposure method of forming patterns of a plurality of layers on a substrate using a plurality of exposure apparatus, comprising:

adjusting an image forming characteristic of a first exposure apparatus in said plurality of exposure apparatus to expose one layer of said substrate in consideration of a stored image distortion correction capability of a second exposure apparatus which is different from said first exposure apparatus; [and]

transferring said substrate from the first exposure apparatus to the second exposure apparatus; and

exposing another layer of said substrate by using said second exposure apparatus.

3. (Amended) The exposure method according to Claim 2, further comprising:

adjusting an image forming characteristic of the second exposure apparatus in consideration of a stored image distortion correction capability of said first exposure apparatus.

6. (Amended) An exposure method of transferring a pattern of a second mask onto a substrate using a second exposure apparatus after transferring a pattern of a first mask onto said substrate using a first exposure apparatus, the method comprising:

adjusting an image forming characteristic of said second exposure apparatus, in consideration of an image distortion [which is difficult or impossible to be] that can not be sufficiently corrected by said first exposure apparatus; and

exposing said substrate to transfer the pattern of said second mask by using said second exposure apparatus.

7. (Amended) An exposure method of transferring a pattern of a first mask onto a substrate using a first exposure apparatus before transferring a pattern of a second mask onto said substrate using a second exposure apparatus, the method comprising:

adjusting an image forming characteristic of said first exposure apparatus, in consideration of an image distortion [which is difficult or impossible to be] that can not be sufficiently corrected by said second exposure apparatus; and

exposing said substrate to transfer the pattern of said first mask by using said first exposure apparatus.

8. (Amended) The exposure method according to Claim 7, wherein said second exposure apparatus is a scanning type exposure apparatus which moves said mask and said substrate synchronously during exposure, and

said image forming characteristic of said first exposure apparatus is adjusted so as to reduce an axially symmetrical image distortion component [which is difficult or impossible to be] that can not be sufficiently corrected by said scanning type exposure apparatus.

9. (Amended) The exposure method according to Claim 7, wherein said second exposure apparatus is a stationary type exposure apparatus in which said mask and said substrate are almost stationary during exposure, and

said image forming characteristic of said first exposure apparatus is adjusted so as to reduce an image distortion including a rectangular component and parallelogrammatic component[, which is difficult or impossible to be] that can not be sufficiently corrected by said stationary type exposure apparatus.

10. (Amended) An exposure method of transferring a pattern of a first mask onto a

substrate using a first exposure apparatus, and of further transferring a pattern of a second mask onto said substrate using a second exposure apparatus, said method comprising:

adjusting an image forming characteristic of said first exposure apparatus, in accordance with stored information on an image distortion correction capability of said second exposure apparatus; and

transferring said pattern of said first mask onto said substrate.

11. (Amended) The exposure method according to Claim 10, wherein said image forming characteristic of said first exposure apparatus is adjusted so as to reduce an image distortion [which is difficult or impossible to be correct] that can not be sufficiently corrected by said second exposure apparatus.

12. (Amended) An exposure method of transferring a pattern of a first mask onto a substrate using a first exposure apparatus, and of further transferring a pattern of a second mask onto said substrate using a second exposure apparatus, said method comprising:

adjusting an image forming characteristic of said first exposure apparatus so as to leave an image distortion[, which] that can be corrected by said second exposure apparatus [can correct]; and

transferring said pattern of said first mask onto said substrate.

13. (Amended) The exposure method according to Claim 12, wherein said second exposure apparatus is a scanning type exposure apparatus which moves said mask and said substrate synchronously during exposure, and

said image forming characteristic of said first exposure apparatus is adjusted so [as to leave] at least one of image distortion components of a rectangular component and a parallelogrammatic component[, which] that can be corrected by said scanning type exposure apparatus remains on said substrate.

14. (Amended) The exposure method according to Claim 12, wherein said second exposure apparatus is a stationary type exposure apparatus in which said mask and said substrate are almost stationary during exposure, and said image forming characteristic of said first exposure apparatus is adjusted so [as to leave] at least one of image distortion components of a trapezoidal component and an axially symmetrical component[, which] that can be corrected by said stationary type exposure apparatus remains on said substrate.

15. (Amended) An exposure method of forming patterns of a plurality of layers on a substrate using a plurality of exposure apparatus, comprising:

transferring a pattern of a first mask onto said substrate using a first exposure apparatus;

adjusting an image forming characteristic of a second exposure apparatus, in accordance with stored information about image distortion correction capability of said first exposure apparatus; and

further transferring a pattern of a second mask onto said substrate using said second exposure apparatus after transferring the pattern of said first mask by said first exposure apparatus and adjusting said image forming characteristics of said second exposure apparatus.

18. (Amended) The exposure method according to Claim 15, wherein transferring a pattern of a first mask is performed in a manner that said pattern of said first mask is transferred with a correction of an image distortion component [which is difficult or impossible to be] that can not be sufficiently corrected by said second exposure apparatus.

22. (Amended) The exposure method according to Claim 19, wherein said one exposure apparatus of said first and second exposure apparatus [roughly] corrects an image

distortion component which can be corrected by said other exposure apparatus, and

said one exposure apparatus of said first and second exposure apparatus [finely] corrects an image distortion component which is difficult or impossible to be corrected by said other exposure apparatus.

23. (Amended) The exposure method according to Claim 22, wherein said stationary type exposure apparatus [roughly] corrects;

at least one image distortion component of a rectangular component and parallelogrammatic component, and [finely] corrects;

at least one image distortion component of a trapezoidal component and an axially symmetrical image distortion component.